

Appl. No. 09/975,912
Amdt. Dated October 6, 2005
Reply to Office action of July 25, 2005

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Remarks/Arguments

The specification is being amended to identify the related applications directed to common subject matter with this application.

Claims 1 – 15 stand rejected, 35 USC 102(e) as being anticipated by Agrawal – Chen patent 6,628,943, (hereinafter “Agrawal”). In response thereto applicants have amended claims 1, 3, 7, 8, 10, 12, 11 and 15 to recite applicants’ invention more precisely and to correct minor errors in some of the claims and have cancelled claim 2 in view of the incorporation of its subject matter into its parent claim 1.

Applicants’ invention utilizes what applicants refer to as a “shadow address” for a mobile station. Contrary to the Examiner’s assertion, with respect to the Examiner’s reliance on Agrawal, the shadow address is not the MAC address. As stated by Agrawal, and repeated in applicants’ specification, the MAC address is a unique address assigned by the manufacturer. Applicants’ shadow address, which is distinct from the normal addresses of the mobile station and the base stations, is, as described in applicants’ specification at page 25, line 5 et seq., assigned to a mobile station by a base station. In fact, as discussed at page 29, line 7 et seq., the shadow address is deleted from the watch list of a base station once the mobile station moves out of the range of that base station. Further, as stated at page 25, lines 2-3, when a mobile station moves to a new cell, if its shadow address conflicts with a shadow address already assigned in that cell, the new base station negotiates with the prior base station to resolve the conflict.

Applicants appreciate that the expression “shadow address” is not a term of art with respect to wireless communications systems. However, applicants, as they are entitled to, have defined and explained the meaning of that expression in their specification, particularly in Section 1.1 from page 13, line 9 to page 15, line 23. See, for example, at page 15, lines 8-10, “With the shadow address approach, besides the unique wireless layer-2 address normally allocated to each mobile station, a unique wireline layer-2 address is also assigned to the mobile station.” Further, at page 15, lines 19-23, “In essence, the wireline layer-2 address assigned to a mobile station can be viewed as a ‘shadow’ that the mobile station casts on the wireline layer 2. For this reason, the wireline layer-2 address assigned to a mobile station will be referred to as the shadow wireline layer-2 address of the mobile station, or ‘shadow address’ for short.”

Without the use of a shadow address a mobile station that has two network interfaces must have a different MAC addresses for each interface. This requires exchange of information as to which of multiple MAC addresses should be used to send packets to a mobile station. Using a shadow address in accordance with applicants’ invention the mobile station can always be addressed by a single MAC address. For example, this both reduces the complexity of the soft handoff operation and reduces the time involved in attaining the soft handoff.

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The MAC address assigned by the manufacturer depends on the radio technology. The shadow address however is a wireline link layer address dynamically assigned to the mobile and, as such, is used by the access point to the mobile and not by the mobile itself.

Applicants respectfully submit that their specification clearly describes the shadow address and its use, none of which is to be found in Agrawal.

Specifically, the Examiner has asserted that the Agrawal MAC address, referring to column 13, lines 30-50, is the same as applicants' shadow address. However, as there stated, the MAC address is the one assigned by the manufacturer, whereas applicants' shadow address is distinct from any such MAC address. Applicant also fails to find anything at column 13, lines 60-66 that can be construed as equivalent to applicants' storing the shadow address in a router. Column 12, lines 45-48 and column 13, lines 4-23, also cited by the Examiner with respect to assigning the shadow address, are similarly lacking in any relevance.

To make perfectly clear that the shadow address is distinct from the MAC address assigned by the manufacturer, claims 1 and 7 have been amended to recite the step of assigning by the first base station the shadow address for the mobile station and that the shadow address have a format compatible with the link layer of a wireline subnet. Applicants note that claim 10 already recites that step.

The rejections of the dependent claims are all based upon the Examiner's erroneous assertion that applicants' shadow address is the MAC address and are therefore submitted also to be in error.

Favorable consideration and allowance of claims 1 and 3-15, as amended, are accordingly respectfully requested.

It is believed that this application is in condition to be passed to issue, and such action is also respectfully requested. However, if the Examiner considers that it would

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expedite the prosecution of this application, the Examiner is invited to telephone applicants' attorney at the number set forth below.

Respectfully submitted,

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